

Notice of Allowability	Application No.	Applicant(s)
	10/041,767	WEBER ET AL.
	Examiner	Art Unit
	Daniel W. Howell	3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to 6-21-04.
2. The allowed claim(s) is/are 18-54.
3. The drawings filed on _____ are accepted by the Examiner.
4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some*
 - c) None
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

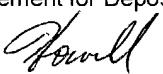
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
Paper No./Mail Date _____
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____


Daniel W. Howell
Primary Examiner
Art Unit 3722

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Figures 1A through 1H have been labeled as Prior Art.

On page 3, line 7, "1A-H" has been changed to "1A, 1B, 1C, 1D, 1E, 1F, 1G, and 1H."

On page 3, line 9, "2A-H" has been changed to "2A, 2B, 2C, 2D, 2E, 2F, 2G, and 2H."

On page 4, line 3, "11A-11D" has been changed to "11A, 11B, 11C, and 11D."

2. The following is an examiner's statement of reasons for allowance: The declaration filed by Kurt Weber under 37 CFR 1.132 is sufficient to overcome the rejection of claims 18-54 based upon commercial success. The declaration correctly states that independent claims 18, 35, and 52 set forth, in either method or apparatus form, a printed circuit board drilling machine in which a drill bit is fed into a circuit board and then retracted a distance such that the tip of the drill bit remains below the top surface of the circuit board. The declaration discusses the substantial time saving that this provides over prior art machines which fully retract the drill bit from the printed circuit board and establishes that the commercial success of this invention is due to this substantial time saving provided by moving the drill bit in the manner set forth in claims 18, 35, and 52. The examiner acknowledges that not a single one of the prior art references of printed circuit board drilling machines reviewed during prosecution of this application showed the concept of retracting the drill bit a distance below the top of the circuit board. For these reasons,

it would not be obvious to modify Japanese '907 with Arai '171 or modify Japanese '908 with Japanese '907 as stated in the prior Office action.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning the content of this communication from the examiner should be directed to Daniel Howell, whose telephone number is 703-308-1728. The examiner's office hours are typically about 10 am until 6:30 pm, Monday through Friday. The examiner's supervisor, Andrea Wellington, may be reached at 703-308-2159.

Any inquiries concerning other than the content of this and previous communications, such as missing references or filed papers not acknowledged, should be directed to the Customer Service Center for Tech Center 3700 at 703-306-5648.

In order to reduce pendency and avoid potential delays, Group 3720 is encouraging FAXing of responses to Office actions directly into the Group at FAX number 703-872-9306. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a USPTO deposit account. Please identify Examiner Daniel Howell of Art Unit 3722 at the top of your cover sheet.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-1148.



Daniel W. Howell
Primary Examiner
Art Unit 3722